
EA220 SDR & Bluetooth Antenna
Datasheet

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目录

1.UAV SDR Antenna0.....	3
2.UAV SDR Antenna1.....	10
3.UAV SDR Antenna2.....	17
4.UAV SDR Antenna3.....	24
5.UAV Bluetooth Antenna.....	30

Revision history

Version	Change notes	Modifier	Date
V1.0		Weaver.peng	2023.06.05



1.UAV SDR Antenna0

1.1 Basic Specifications

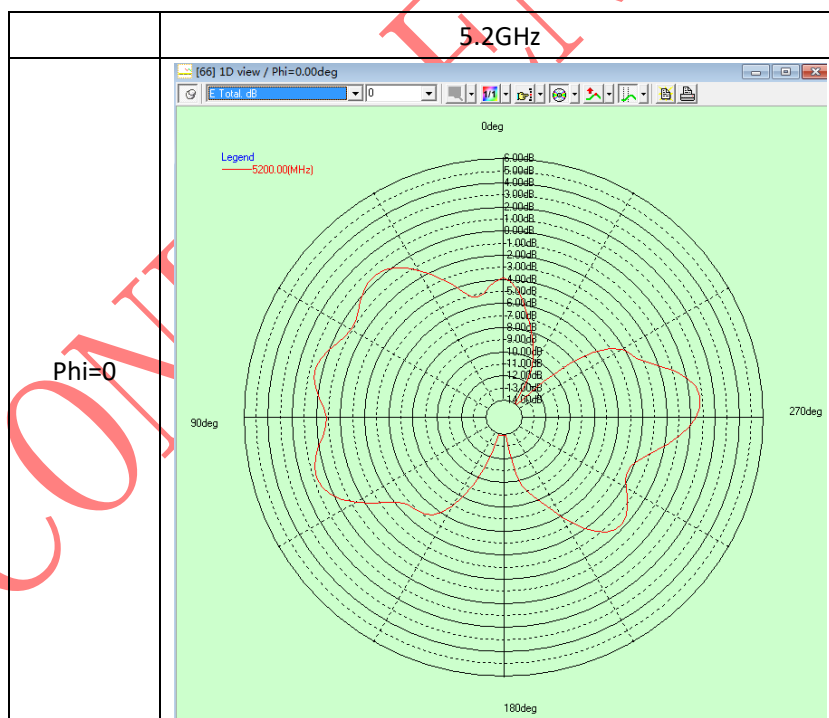
No.	Specification	Descriptions	Notes
1	Antenna Name	左前机臂 SDR Antenna	Ant0
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	2.8dBi@2.4~2.483GHz 3.2dBi@5.15~5.25GHz 3.8dBi@5.725~5.875GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight	2g	

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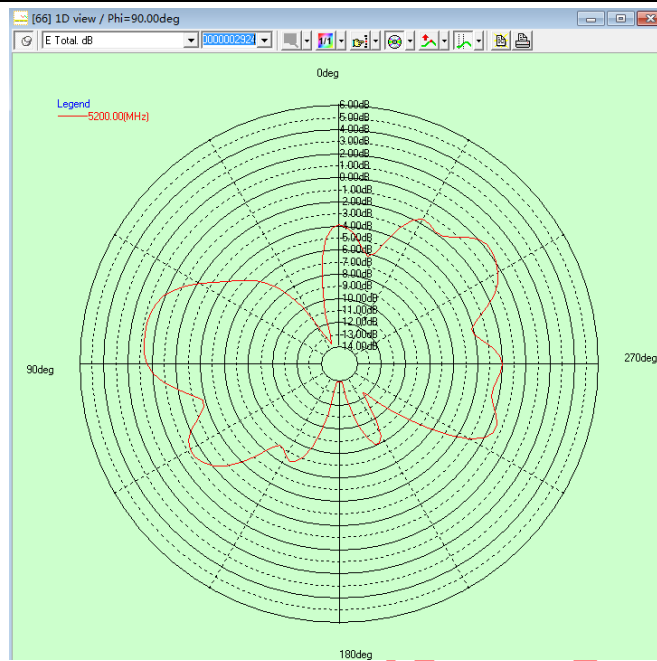
1.2 Gain

Frequency	E Total. dB(dB) – Ant0
2400MHz	2.6
2440MHz	2.7
2480MHz	2.7
2500MHz	2.8
5150MHz	2.9
5200MHz	3
5250MHz	3.2
5700MHz	3.5
5750MHz	3.3
5800MHz	3.5
5850MHz	3.6

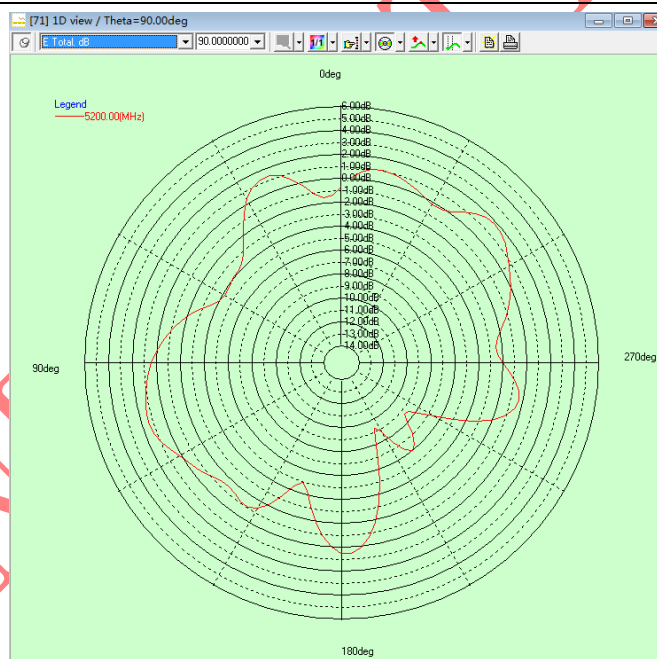
1.3 radiation pattern

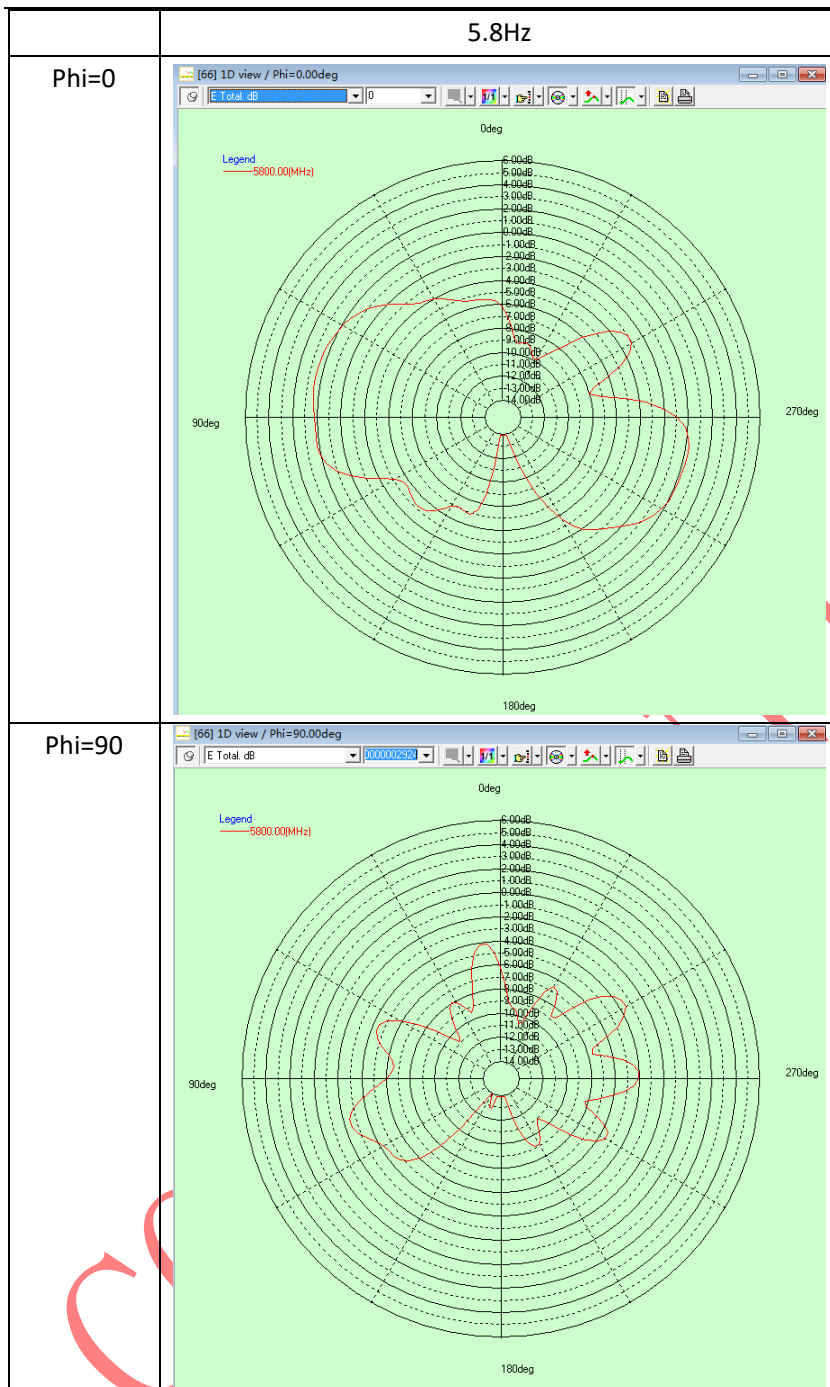


Phi=90

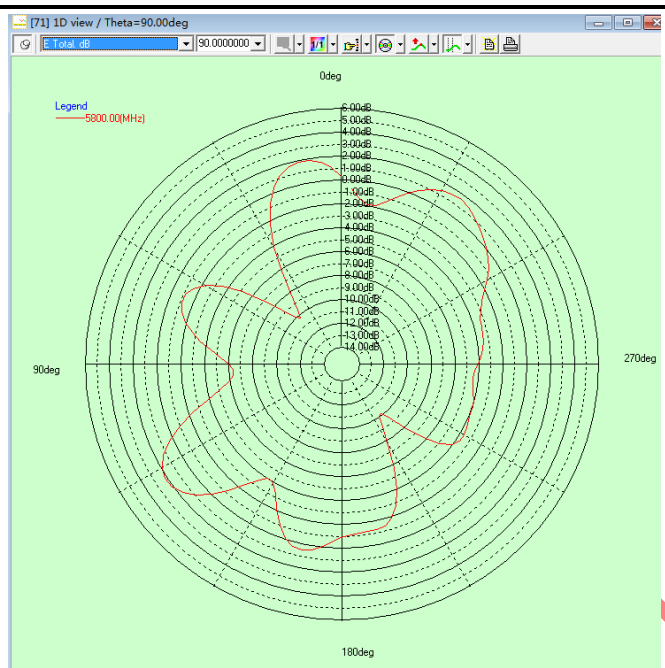


Theta90

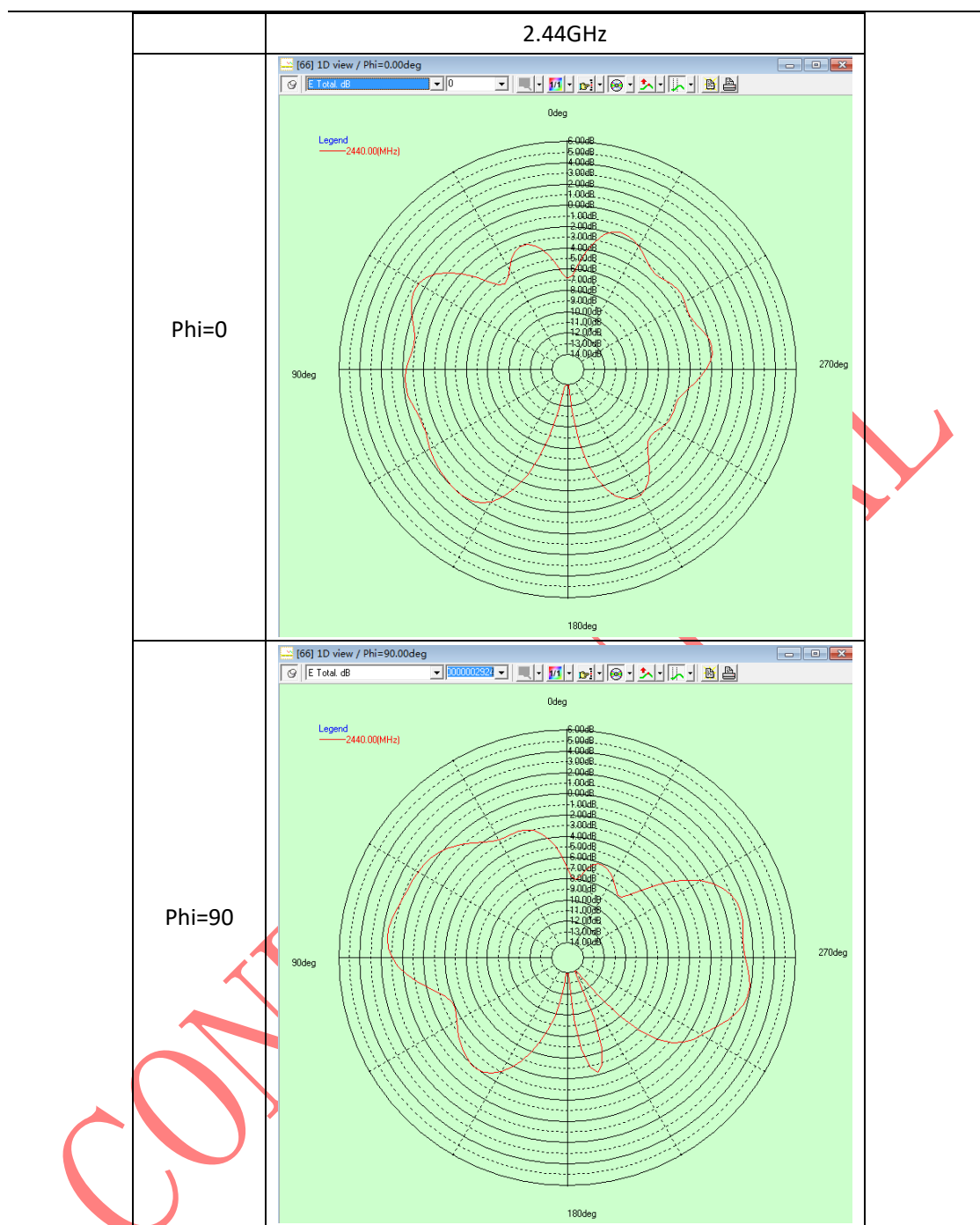


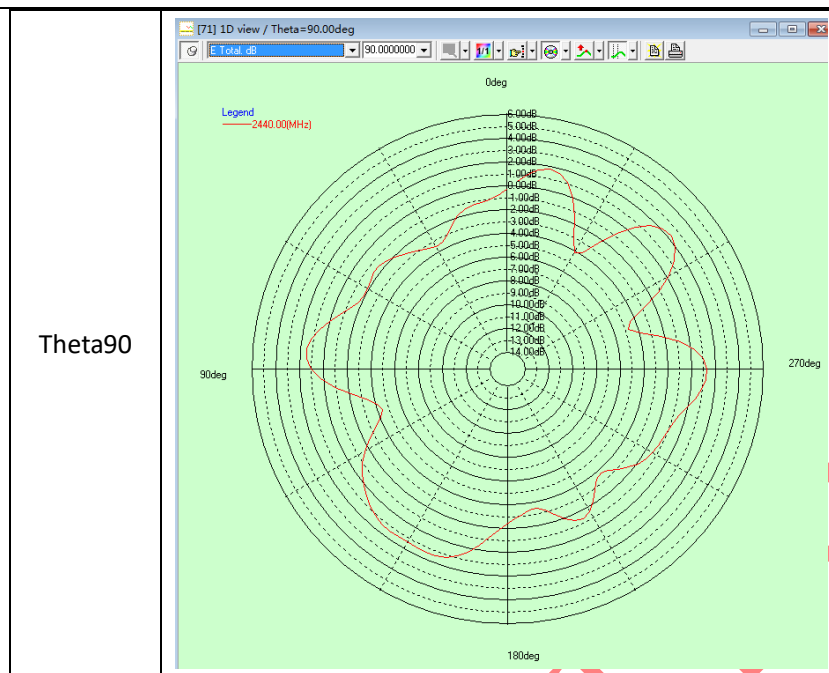


Theta90



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1.4 Structure drawing

Ant0:

2.UAV SDR Antenna1

2.1 Basic Specifications

No.	Specification	Descriptions	Notes
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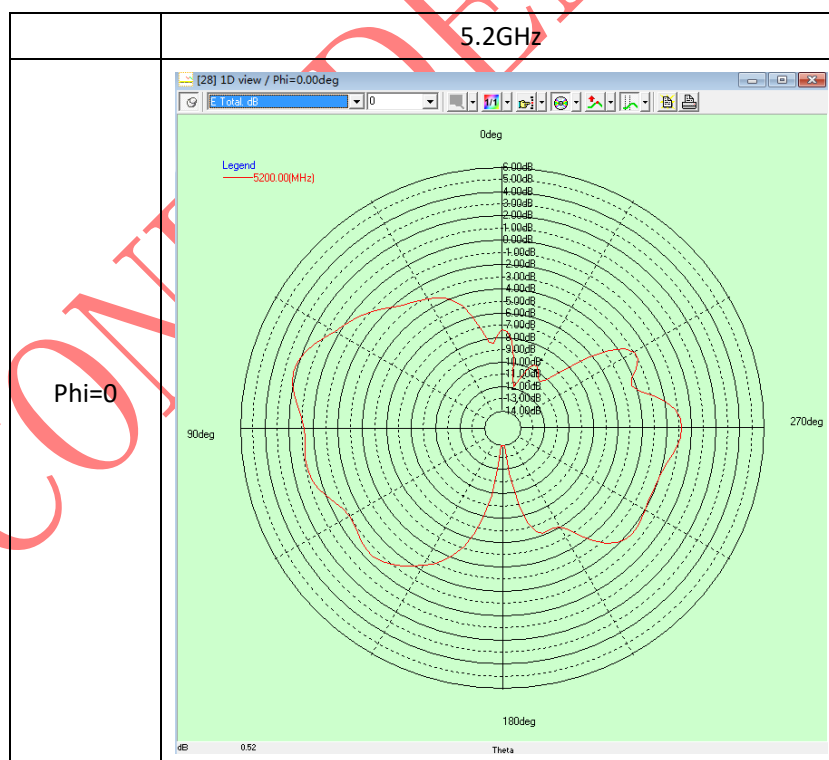


1	Antenna Name	右前机臂 SDR Antenna	Ant1
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	3.3dBi@2.4~2.483GHz 4.0dBi@5.15~5.25GHz 4.4dBi@5.725~5.875GHz	
7	Efficiency	$\geq 50\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight	2g	

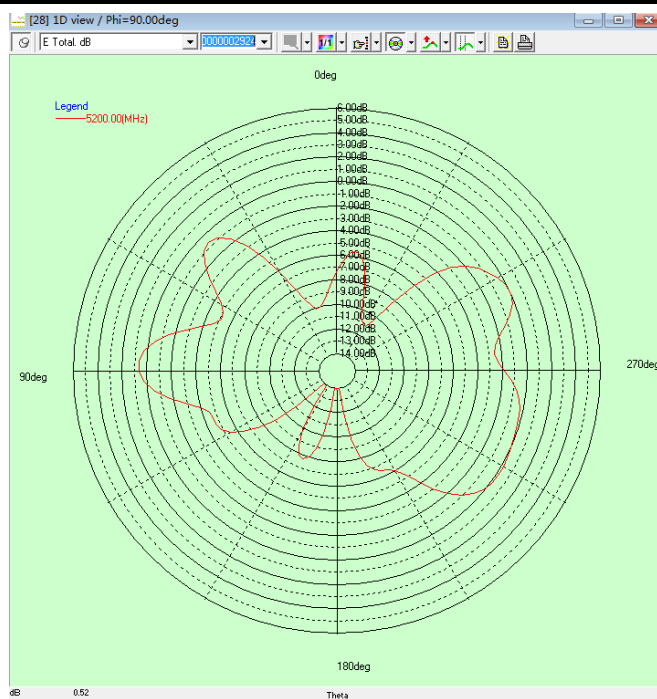
2.2 Gain

Frequency	E Total. dB(dB)- Ant1
2400MHz	3.0
2440MHz	2.8
2480MHz	3.1
2500MHz	2.9
5150MHz	3.3
5200MHz	3.5
5250MHz	3.8
5700MHz	3.8
5750MHz	3.8
5800MHz	4.0
5850MHz	4.1

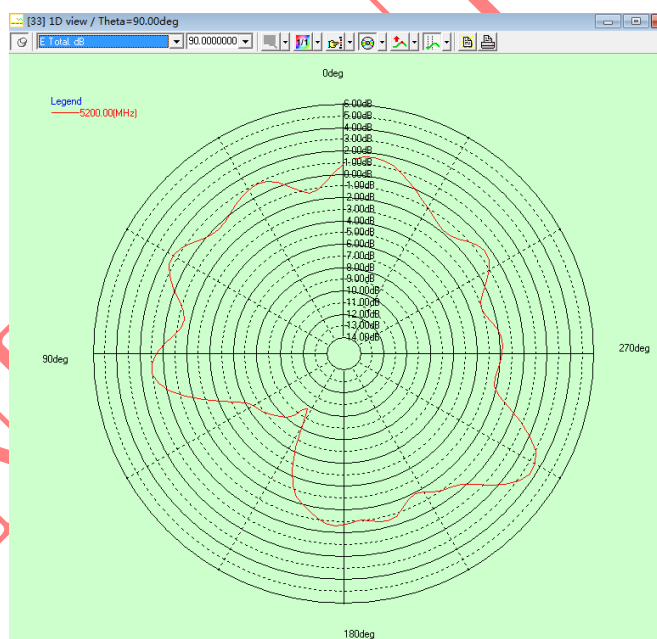
2.3 radiation pattern

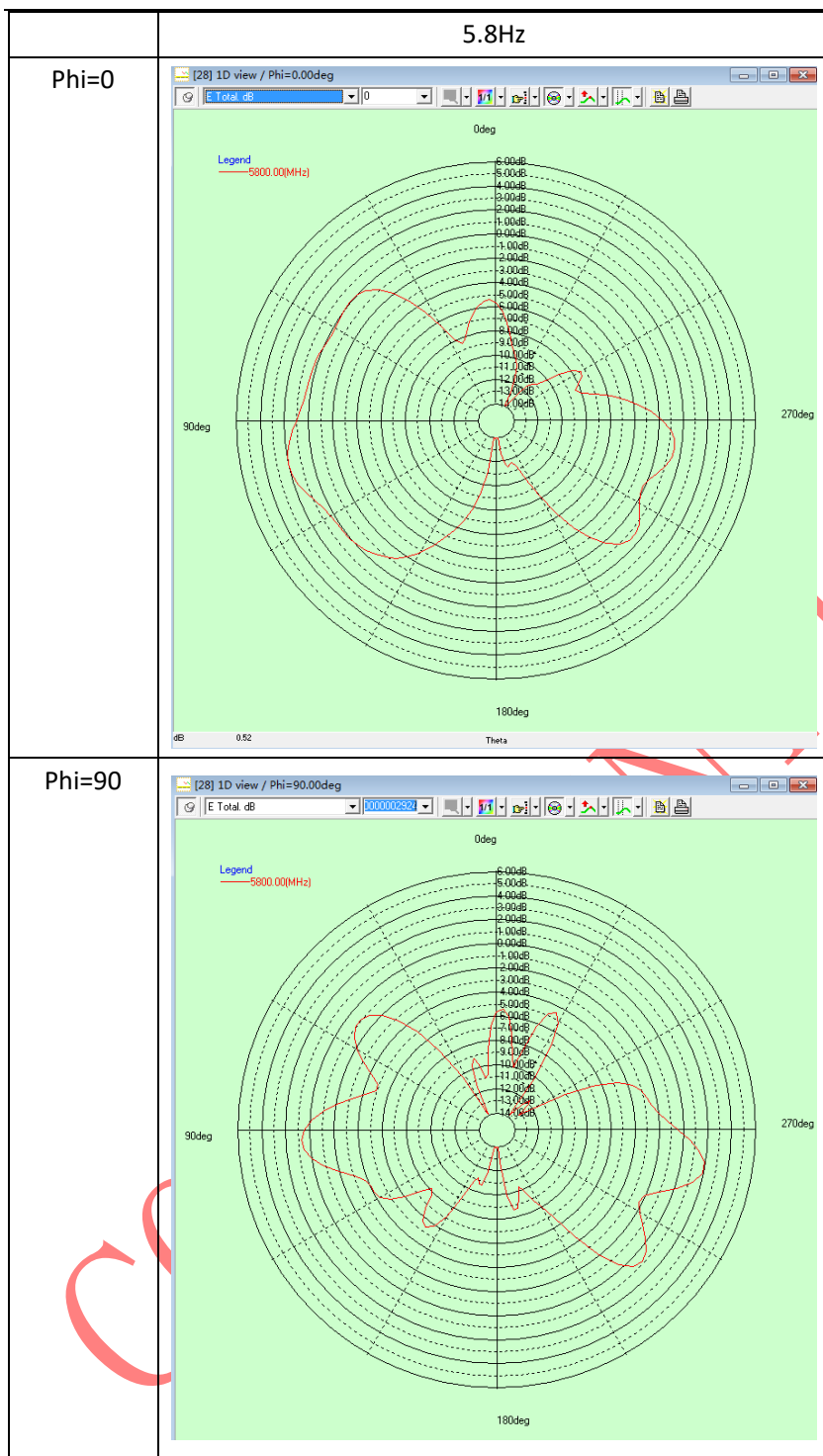


Phi=90

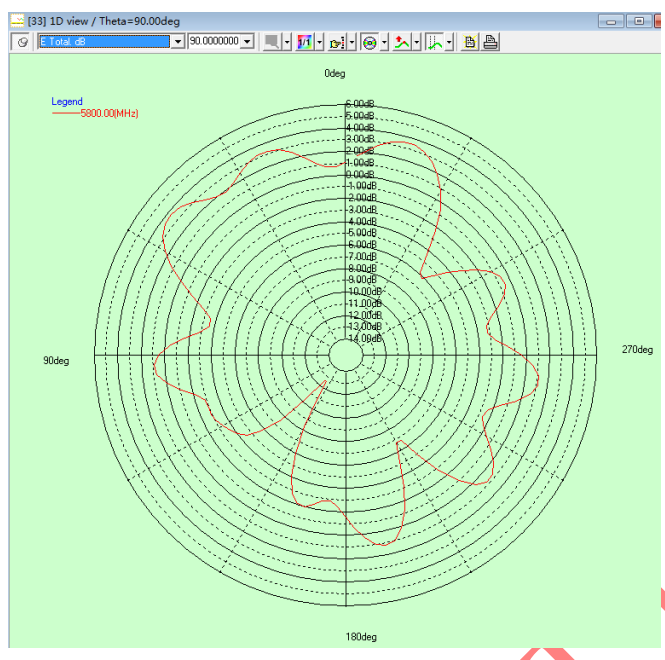


Theta90





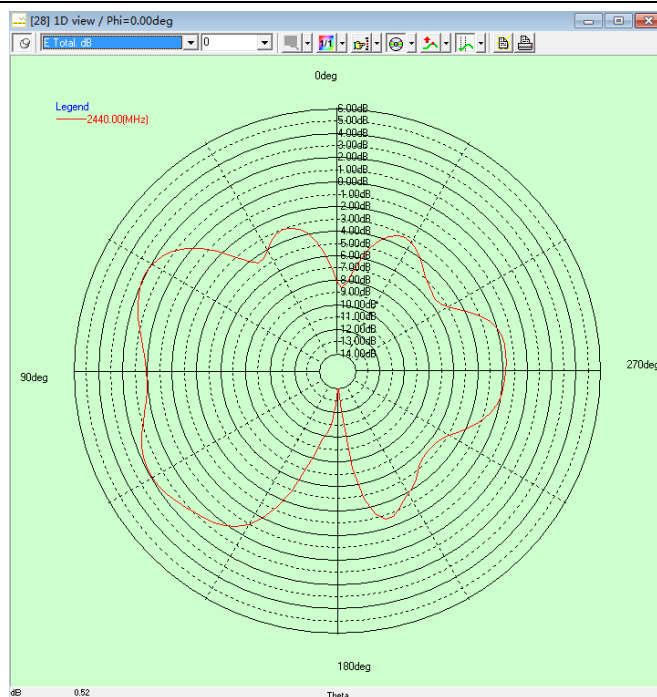
Theta90



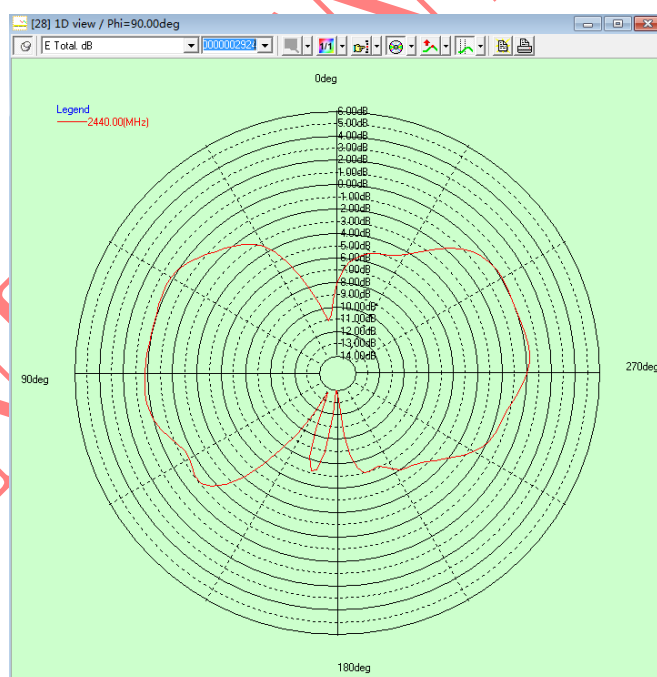
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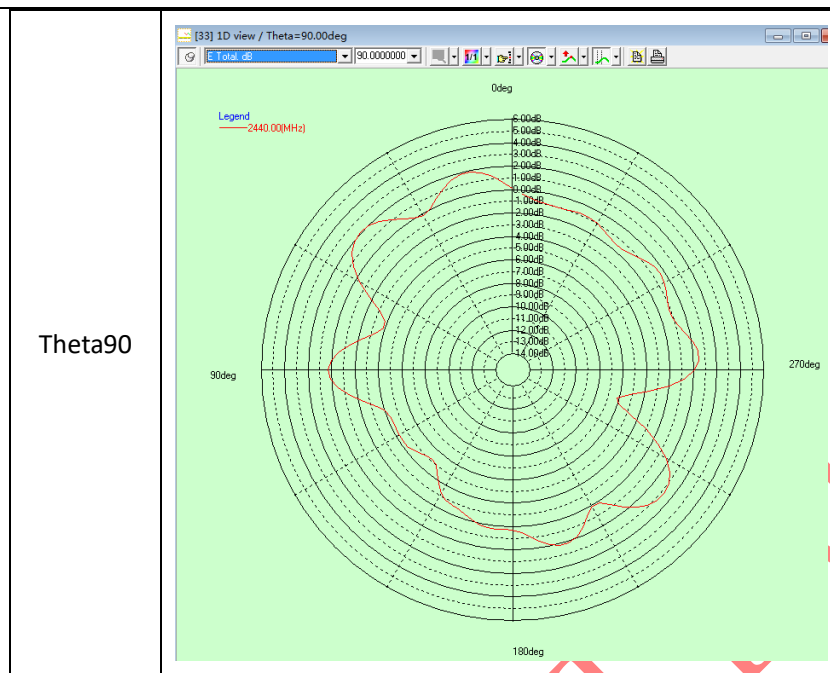
2.44GHz

Phi=0



Phi=90





2.4 Structure drawing

Ant1:

3.UAV SDR Antenna2

3.1 Basic Specifications

No.	Specification	Descriptions	Notes
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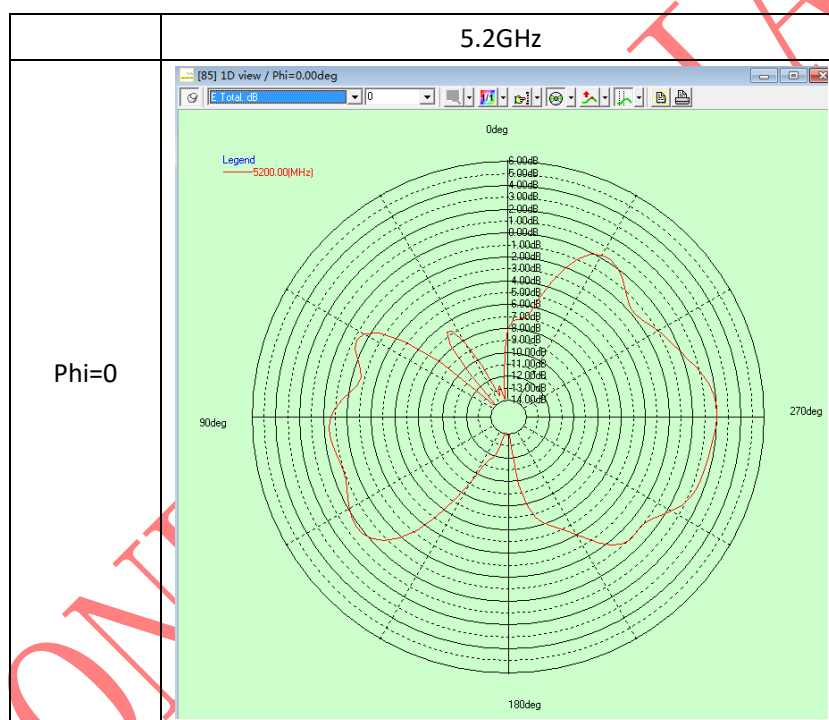
1	Antenna Name	右后机臂 SDR Antenna	Ant 2
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省 昆山市玉山镇紫 竹路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	
6	Gain (MAX)	2.9dBi@2.4~2.483GHz 4.5dBi@5.15~5.25GHz 4.5dBi@5.725~5.875GHz	
7	Efficiency	≥50%	
8	VSWR	≤2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	1.8g	

3.2 Gain

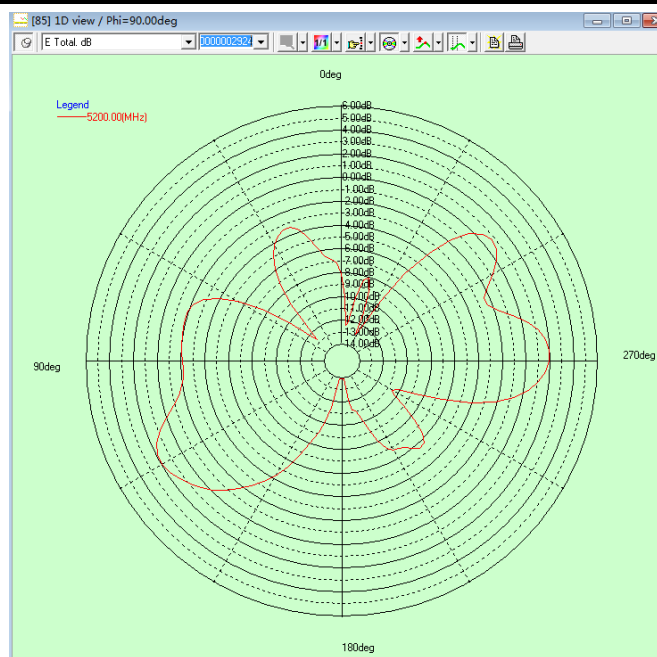
Frequency	E Total. dB(dB)- Ant2
2400MHz	2.5
2440MHz	2.8
2480MHz	2.5

2500MHz	2.7
5150MHz	4.5
5200MHz	4.3
5250MHz	4.4
5700MHz	4.0
5750MHz	4.3
5800MHz	4.5
5850MHz	4.4

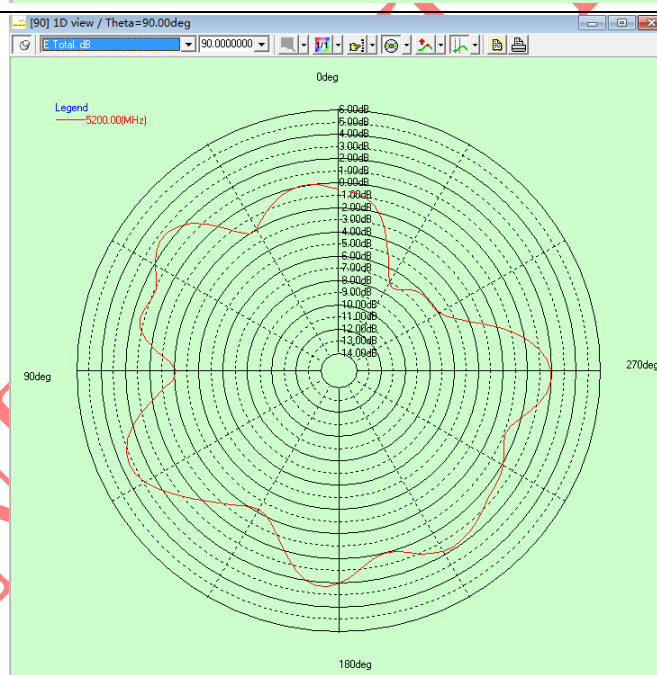
3.3 radiation pattern



Phi=90

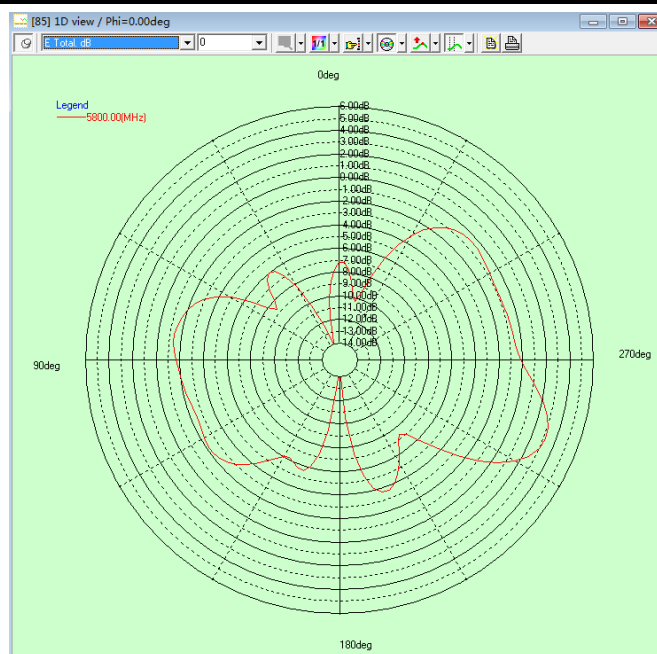


Theta=90

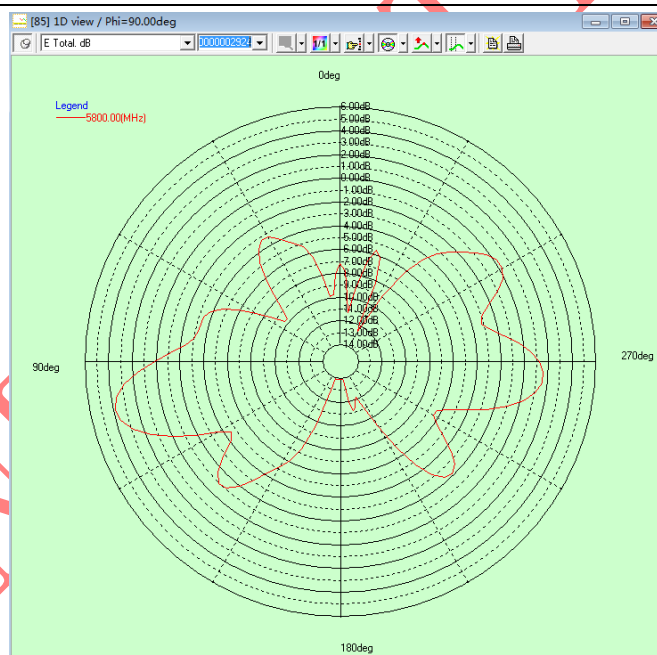


5.8GHz

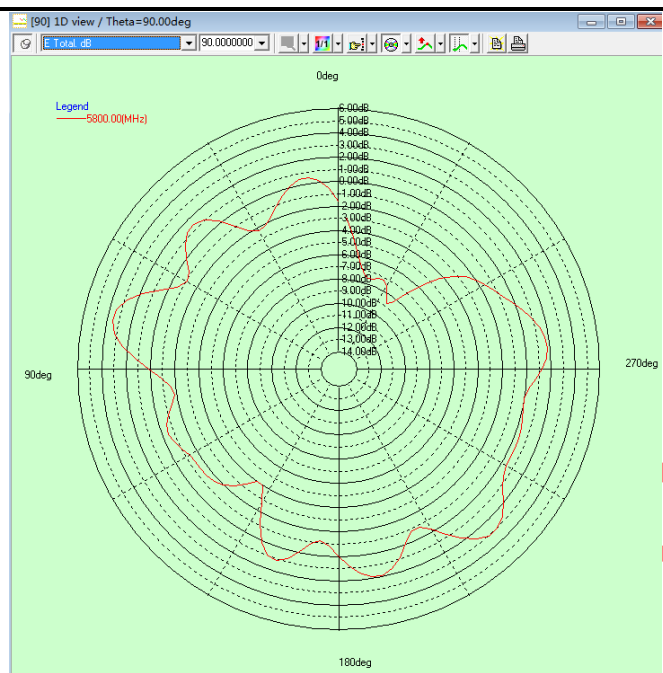
Phi=0



Phi=90

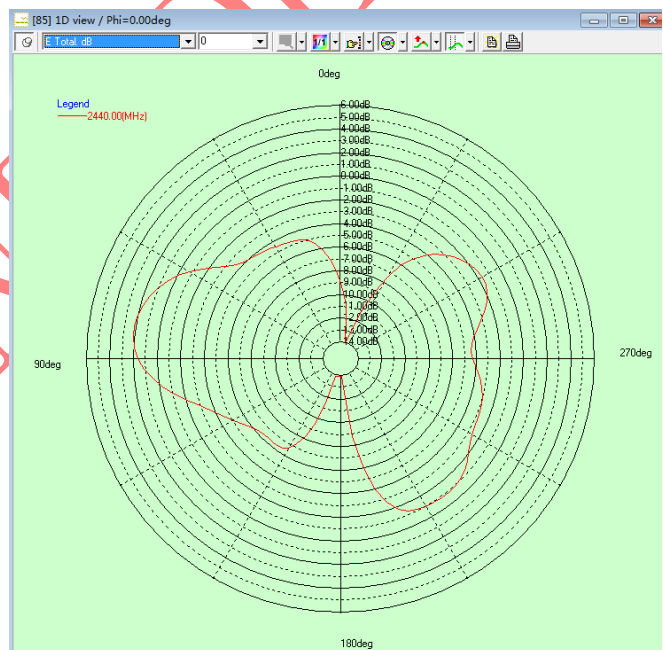


Theta=90

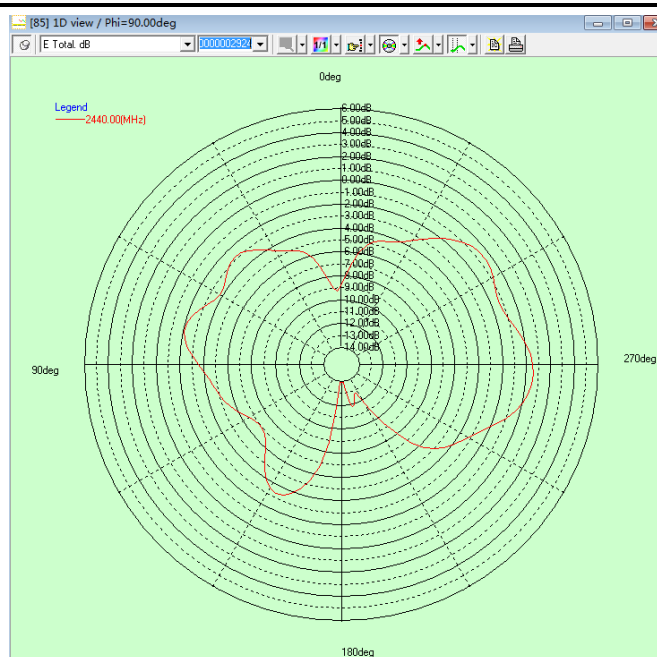


2.4GHz

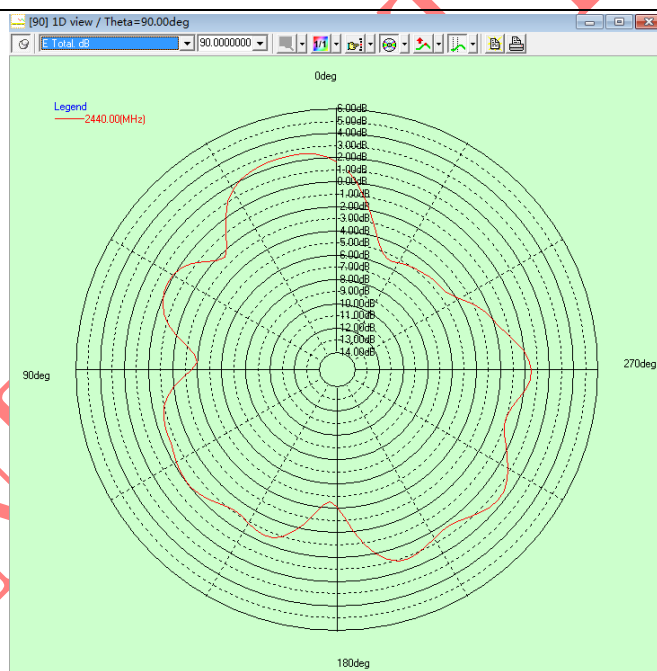
Phi=0



Phi=90



Theta=90



3.4 Structure drawing

4.UAV SDR Antenna3

4.1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	左后机臂 SDR Antenna	Ant 3
2	Manufacturer	昆山睿翔讯通通信技术有限公司	Address: 江苏省昆山市 玉山镇紫竹 路 1689 号
3	Operation Frequency	2.4~2.483GHz; 5.15~5.25GHz; 5.725~5.875GHz	
4	Connector Type	Ipx1	
5	Impedance	50ohm	



6	Gain (MAX)	3.3dBi@2.4~2.483GHz 4.5dBi@5.15~5.25GHz 4.0dBi@5.725~5.875GHz	
7	Efficiency	$\geq 40\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	1.8g	

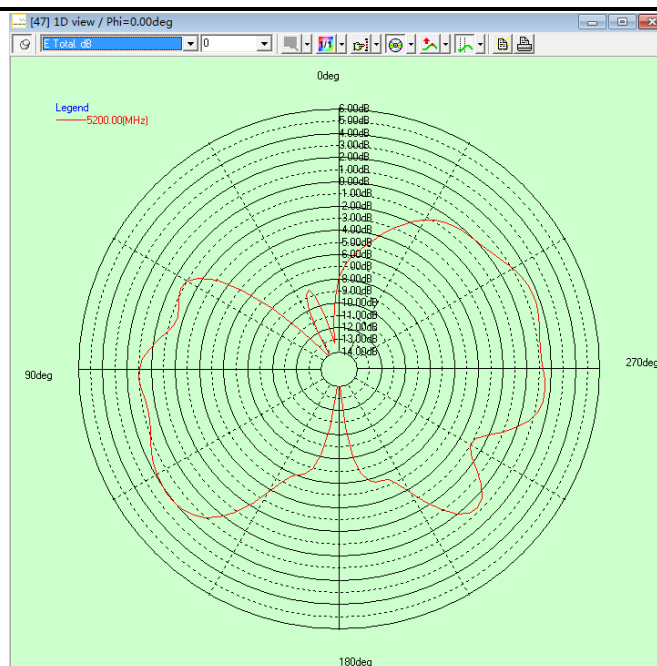
4.2 Gain

Frequency	E Total. dB(dB)-Ant2
2400MHz	3.0
2440MHz	2.8
2480MHz	3.0
2500MHz	2.9
5150MHz	4.5
5200MHz	4.5
5250MHz	4.5
5700MHz	4.0
5750MHz	3.8
5800MHz	3.6
5850MHz	3.6

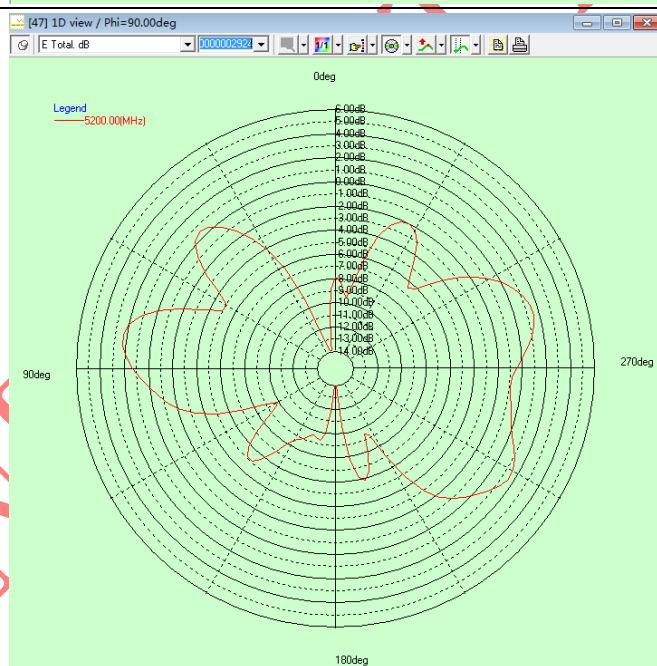
4.3 radiation pattern

	5.2GHz
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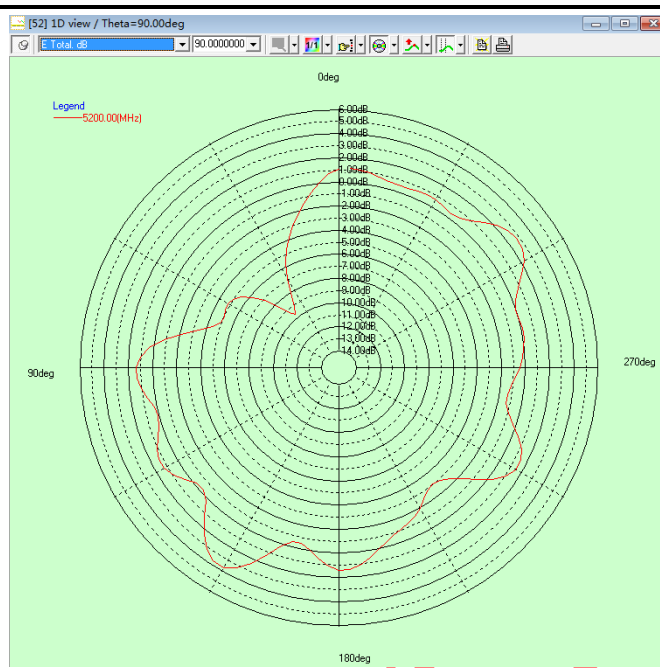
Phi=0



Phi=90

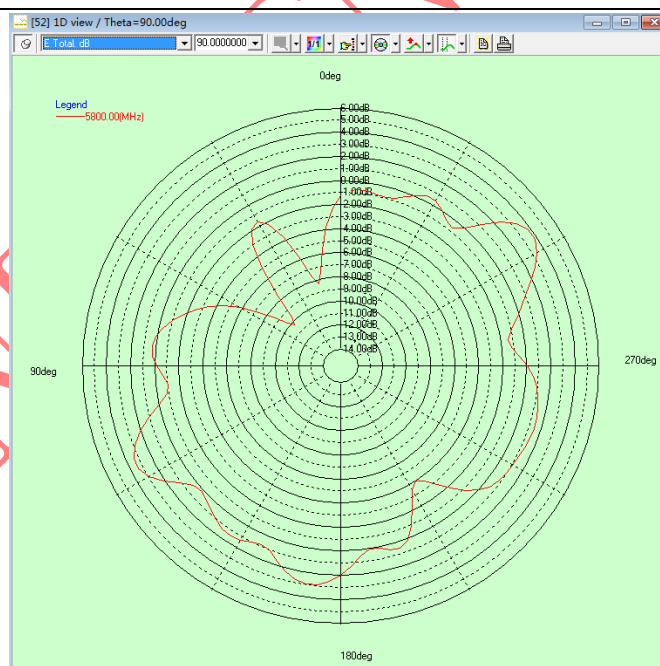


Theta=90

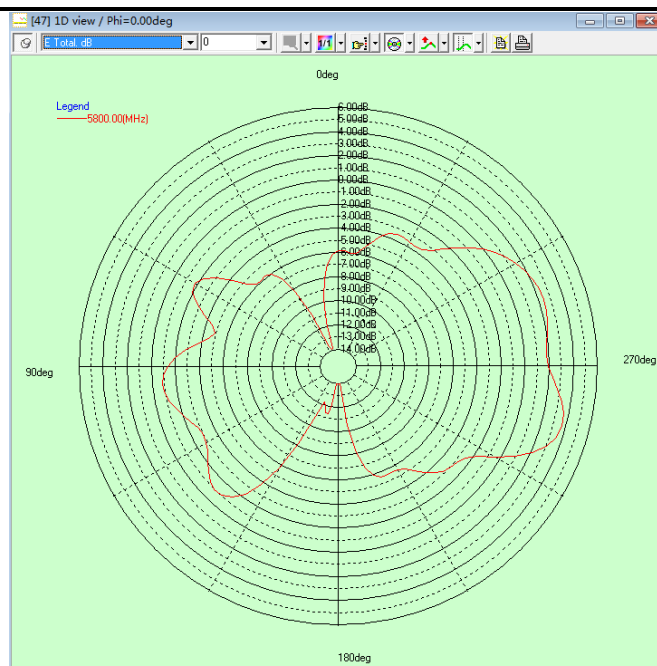


5.8GHz

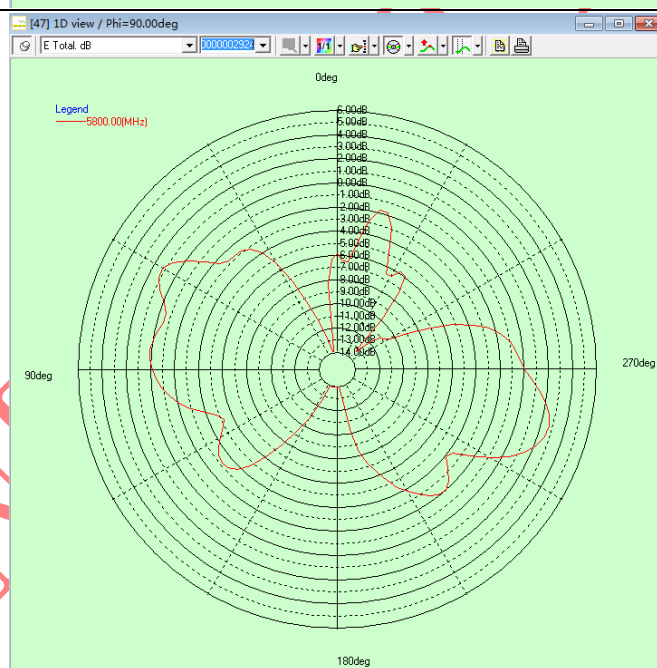
Phi=0



Phi=90

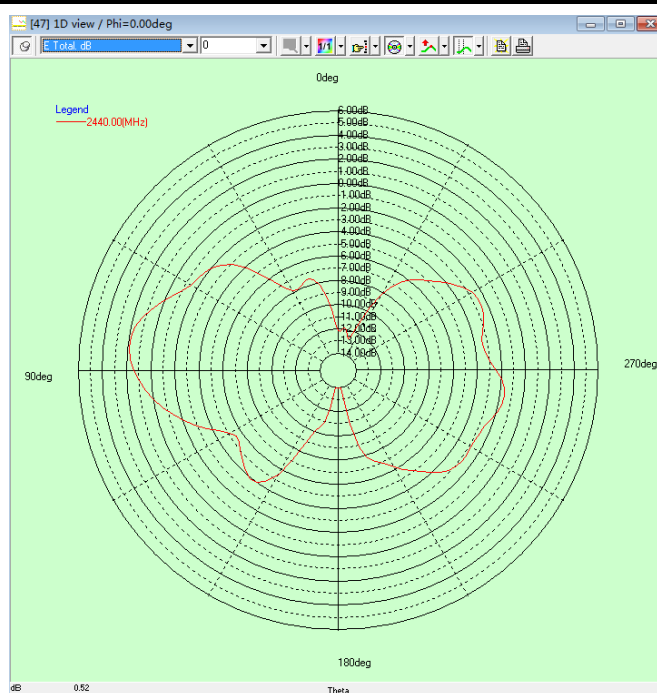


Theta=90

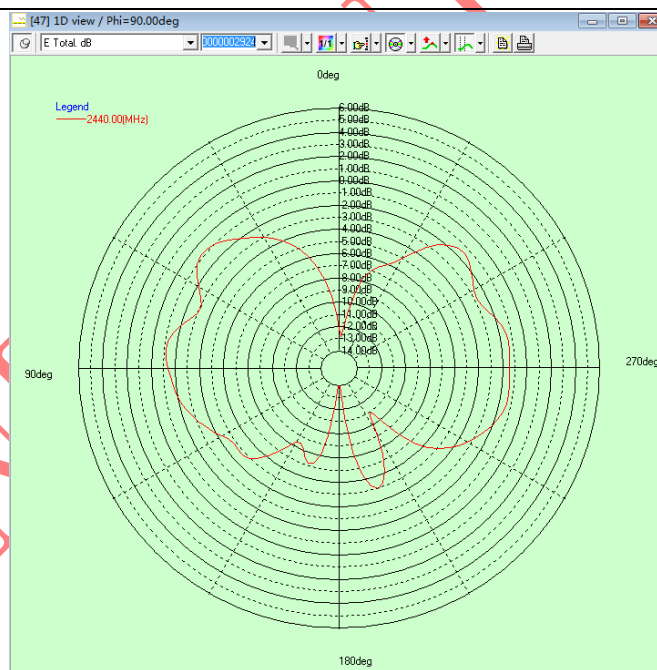


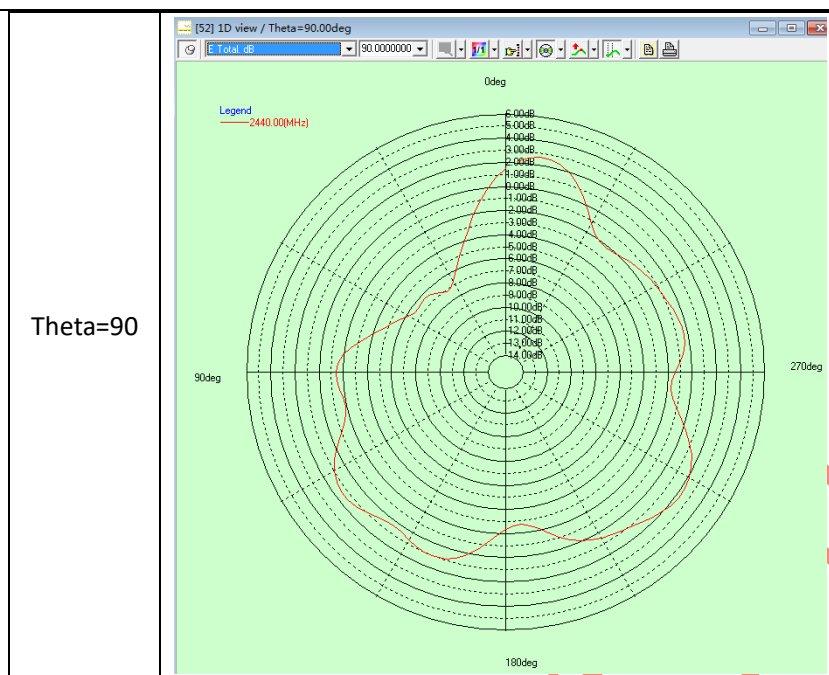
2.4GHz

Phi=0



Phi=90





4.4 Structure drawing

5.UAV Bluetooth Antenna

5.1 Basic Specifications

No.	Specification	Descriptions	Notes
1	Antenna Name	飞机蓝牙天线	蓝牙



2	Manufacturer	禾邦电子（苏州）有限公司	Address: 中国江苏省苏州市相城区春秋路 5 号
3	Operation Frequency	2.4~2.483GHz;	
4	Connector Type	IpeXI	
5	Impedance	50ohm	
6	Gain (MAX)	3.3dBi@2.4~2.483GHz	
7	Efficiency	$\geq 40\%$	
8	VSWR	≤ 2	
9	Antenna Type	Linear polarization Dipole	
10	3dB Beamwidth	Omnidirectional horizon	
11	Weight (with cable)	0.6g	

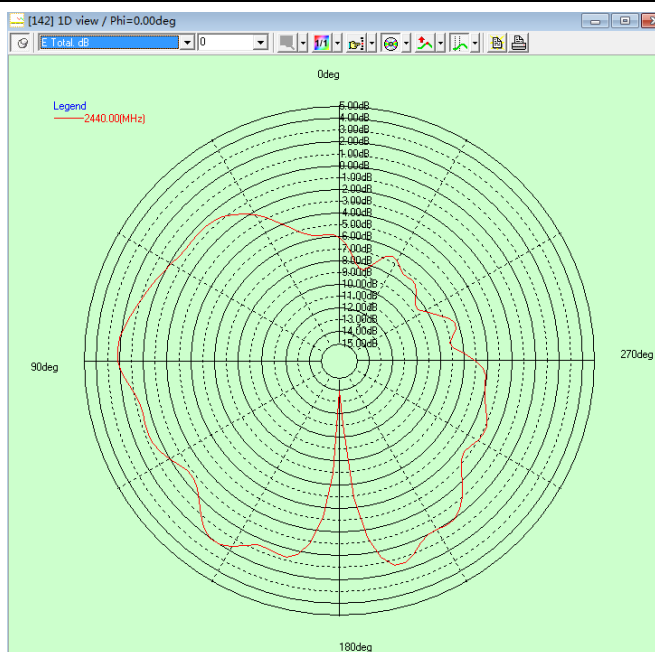
5.2 Gain

Frequency	E Total. dB(dBm)
2400MHz	2.6
2440MHz	2.8
2480MHz	3.0
2500MHz	2.8

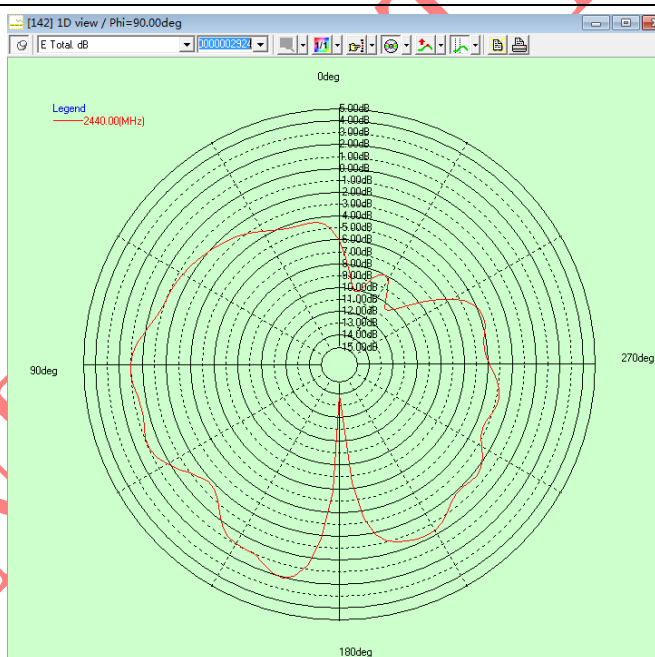
5.3 radiation pattern

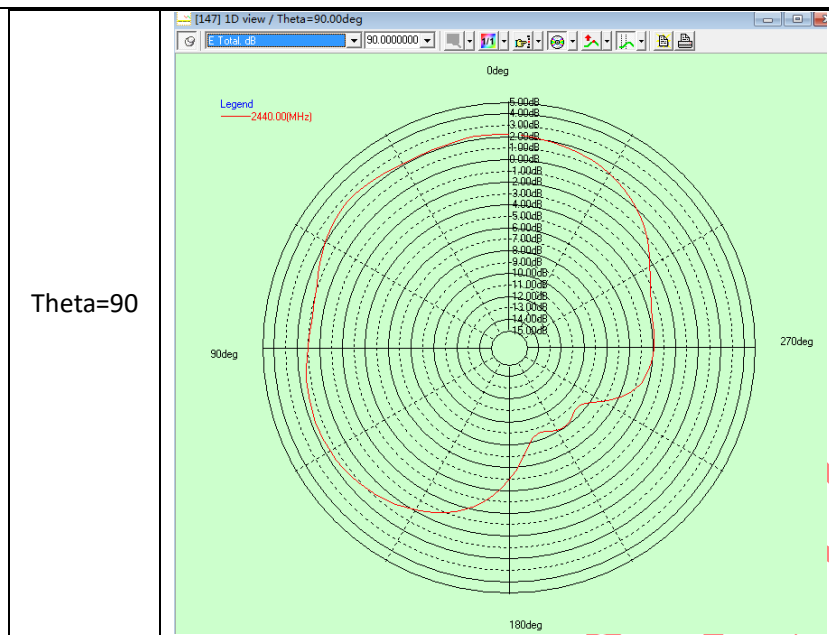
	2.4GHz
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Phi=0



Phi=90





5.4 Structure drawing

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